

\* SWBAT define power and apply it to climbing stairs

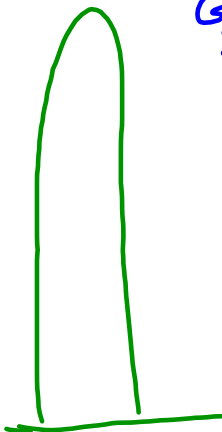
Sep 6-2:31 PM

What did we find?

$GPE_{top}$   
 $KE_{top}$

AVG HEIGHT?

} TOTAL:



$GPE_{bot}$   
 $KE_{bot}$

} TOTAL:

Apr 25-7:54 AM

1. What was the **AVERAGE** height for your (team's) popper?
2. How much **KINETIC** energy (KE) did your popper have at the **top** (peak)?
3. How does the **total** energy compare between the top and the bottom?
  - a) more at top
  - b) more at bottom
  - c) same at top and bottom

Dec 2-7:55 AM

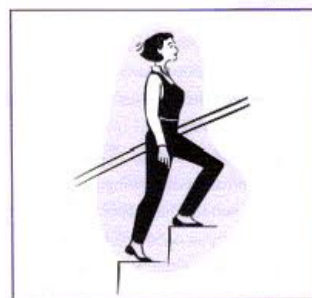
# Welcome!!!

SECA Physics  
Monday 1 December 2014

H. Leslie Grebe

\* Pick up:

- slip of paper (for later)
- notebook (if you use one)



Opening Questions:

On your index card: write at least 2 meanings of the word "power".

Centering...

Sep 7-7:04 AM

Power INSPIRING, MOVING  
STRENGTH  
- ATHLETE  
- WATER

IN CHARGE  
AUTHORITY  
POLITICAL CONTROL /  
INFLUENCE

ELECTRICITY MIND  
ON / OFF SURGE MONEY

POWER IS WORK OVER TIME.

$$P = \frac{W}{t}$$

Nov 30-10:05 AM

Force:

A PUSH OR PULL  
NEWTONS

Work:

WHEN A FORCE CAUSES A DISPLACEMENT.  
1 N · m = 1 JOULES  $W = F \cdot d$ 

Power:

WORK OVER TIME 1 WATT =  $\frac{1J}{1s}$ 

$$\text{Power} = \frac{\text{WORK}}{\text{TIME}} = \frac{\text{FORCE} \times \text{DISTANCE}}{\text{TIME}}$$

Dec 2-7:51 AM

## Who has the most power????

- \* Partner up: Runner and Timer/recorder
- \* Only need to measure 4 things
- \* Rest is "plug and chug" -- fill in all the blanks

What'd we find???

Dec 1-7:31 AM

## Daily 3 Questions

- \* Every day except test/project days
- \* 3 Questions on the topics of the day
- \* Main source of daily points
- \* I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. Power is
  - A. a push or a pull
  - B. when a force causes a displacement
  - C. work over time
2. What was the general range of power results for our experiment?
3. Which is bigger 1 Watt or 1 horsepower?

Dec 2-7:55 AM